

Chapter 7 – The Action Plan

This chapter presents City Light's recommended long-term strategy and two-year action plan.

This Integrated Resource Plan (IRP) presents a course of action that utilizes the best information available. The plan meets the overall objective of determining strategies for the type, amount and timing of new resource acquisitions to meet electrical load over the 20 years between 2008 and 2027.

The preferred portfolio satisfies the criteria established at the beginning of the planning process: reliability of service, reasonable costs, reasonable risks and limited environmental impacts. The preferred portfolio:

- Focuses on improving City Light's seasonal resource balance in the short term, thus avoiding the costs of major resource additions early in the planning period.
- More clearly identifies the reliability risk inherent in the current resource mix and provides a plan of action to mitigate that risk.
- Considers the risks attributable to new resources when evaluating them for the plan.
- Clearly identifies the environmental impacts of resources and portfolios in the plan, in terms of the emissions of air pollutants and impacts to land, water, wildlife and aesthetics.

Any 20-year plan faces many uncertainties. This is particularly true in an environment as dynamic and volatile as energy markets. The intent of the IRP is not to lock the City of Seattle or City Light into a 20-year course of action but to provide long-term strategic direction for resource acquisition and a short-term action plan to move in that direction.

City Light confronts a wide range of challenges in meeting its mission of providing reliable, competitively priced and environmentally sound electricity to customers. These challenges require many decisions each year, large and small, related to power resources. Creating a long-term resource plan provides the framework for a short-term action plan that will help guide the utility on a path that brings long-term resource benefits to customers.

Action Plan

This section describes City Light's action plan as related to resource acquisition, transmission and planning. Major elements of the action plan include:

Resource Acquisition

- Continue to acquire conservation resources
- Investigate new generating resources
- Evaluate and acquire cost-effective "lost opportunity" resources

Transmission

- Ensure adequate transmission capacity to meet resource needs

Planning

- Explore, monitor and evaluate potential future technologies and resources
- Enhance IRP analytical capabilities
- Keep the IRP up-to-date with new information

Resource Acquisition

Conservation

Conservation has proven to be a good investment for more than 30 years, and City Light will continue to pursue the acquisition of cost-effective conservation.

While the cost and environmental benefits of conservation are well known, one benefit of conservation may have gone relatively unnoticed. In a transmission-constrained future, conservation becomes more cost effective and pragmatic as a resource. Expanding transmission infrastructure takes many years and depends upon the close cooperation of a variety of governmental agencies and electric utilities. However, the citizens of Seattle can directly control acquisition of conservation resources.

Generation

The IRP makes many assumptions about the availability and costs of generic resources. Implementation of the IRP requires confirming resource availability and costs for specific opportunities. If the specific resource opportunities from real world suppliers do not match City Light's assumptions, the IRP must be adjusted to more accurately reflect the costs and characteristics of the resources that are actually available.

Lost Opportunities

The 2008 IRP identifies "lost opportunity" resources including seasonal exchanges, seasonal capacity contracts, landfill gas, and a contract with an existing hydro facility. These opportunities may be lost if they are not acted upon within a certain time frame and will require prompt investigation. This can mean acquiring resources ahead of schedule, if it is more cost effective to do so than to acquire a higher cost resource at a later time.

Investigation and monitoring of new resource technologies is also important to keep abreast of future resource opportunities. Technological advancement and economies of scale can expand future choices for cost-effective and environmentally responsible resources.

During the 2008 IRP, City Light identified potential generation efficiency upgrades at its Skagit River hydroelectric facilities. Because of uncertainty about development costs, this resource was not included in the portfolios in the 2006 IRP. It is included in the 2008 IRP.

Transmission

Adequate transmission capacity can reduce the costs of new resources by allowing more seasonal exchanges and power purchases, thereby reducing the amount of generation reserves that would otherwise be necessary. Important decisions to expand regional transmission facilities in the Pacific Northwest will be made well within the 20-year time frame of this plan. City Light will work to ensure the availability of adequate transmission facilities that are critical to Seattle's electricity supply, reliability, cost and energy policy objectives.

Future Integrated Resource Planning

Improving information and planning capabilities can enhance the quality of information available to City policy-makers and facilitate better long-term decision making, lower costs and reduced risk.

This 2008 IRP sets the long-term strategic direction for how City Light will meet future growth in electricity demand for Seattle. Many assumptions about the future are used in the IRP. While City Light sought to use the best information and analytical methods available for the 2008 IRP, it is impossible to correctly forecast all aspects of a dynamic market, operating and technological environment. City Light will continue to develop and refine its modeling tools and assumptions for use in future resource planning. Demand forecasts will be prepared and updated routinely and new information on resource costs and availability will be collected.

IRP Action Plan, 2008-2009

Specific actions recommended/planned for the next two years are shown in the table below.

Table 7-1. IRP Action Plan, 2008-2009

Actions	2008	2009
Conservation Resources		
Pursue accelerated conservation in the targeted amounts	8.4 aMW by end of 4th Qtr	12 aMW by end of 4th Qtr
Generation Resources		
Pursue full BPA contract rights	Finalize negotiations and elections for 2011	
Complete a power purchase agreement with a landfill gas supplier by mid-2009	Negotiate contract by end of 4th quarter	Plant to begin construction and testing
Investigate future capacity versus energy needs as the region grows shorter on capacity	Begin data collection	Complete analysis in time for 2010 IRP
Market Resources		
Investigate and acquire seasonal exchanges and/or capacity contracts to offset near-term reliability risk	Additional 50 aMW as needed	Additional 55 aMW as needed
Other New Resources		
Evaluate results of the distributed generation market study and pursue any cost-effective opportunities with customers	Engage in discussions with appropriate customers by year end	Decision on go or no go with appropriate customers by 2010
Collect and update information on costs of a wide range of new resources commercially available by June 2008	Ongoing	Ongoing
Continue investigating the development status, costs and commercial availability for geothermal, solar, and demand response. Acquire these resources as appropriate	Ongoing	Select technologies for inclusion in 2010 IRP
Transmission		
Continue to participate in and support the development of Columbia Grid	Ongoing	Ongoing
Provide comments to the U.S. Department of Energy and Federal Energy Regulatory Commission on transmission issues important to City Light	Ongoing	Ongoing
Future IRPs		
Continue to refine assumptions, forecasts and modeling	Ongoing	Ongoing
Support research on the impacts of climate change to North Cascade glaciers and water temperatures in the Skagit, Pend Oreille, and Columbia Rivers	Ongoing	Ongoing

